## National Institute for Occupational Safety and Health

## SIMPLE SOLUTIONS

## Oh, My Aching Body!

Construction work is hard work, and construction workers feel the results. In one survey, seven out ten construction workers from 13 trades reported back pain, and nearly a third went to the doctor for it (Cook et al, 1996).

Back pain, carpal tunnel syndrome, tendinitis, rotator cuff syndrome, sprains, and strains are types of musculoskeletal disorders. *Work-related musculoskeletal disorders (WMSDs)* are caused by job activities and conditions, like lifting, repetitive motions, and work in confined areas. All of these are part of construction work. WMSDs can become long-term, disabling health problems that keep you from working and enjoying life. Not only do these injuries hurt your body, but they can reduce your earnings and your employer's profit.

You have an increased risk of these injuries if you often:

- Carry heavy loads
- Work on your knees
- Twist your hands or wrists
- Stretch to work overhead
- Use certain types of tools
- Use vibrating tools or equipment.

On top of that, tight deadlines mean a fast pace. Pushing the pace increases your risk even more.

A study of workers' compensation claims filed in Washington State between 1990–98 reported that the highest risks for developing a WMSD were "in industries characterized by manual handling and forceful repetitive exertions." According to the study, construction work accounted for 10 of the top 25 sectors in need of interventions to prevent neck, back, and upper extremity WMSDs (Silverstein, 1998).

One insurance company reported that 29% of insured mechanical and electrical contractors' workers' compensation claims were due to WMSDs. A quarter of those claims resulted in temporary or permanent disability. The insurer also reported that WMSD claims for electrical contractors average around \$6,600 for each WMSD, while the average claim for a mechanical contractor was around \$7,300 (NIOSH 2006).

Many people in construction believe that sprains and strains are just the nature of the business. But new tools and materials are now available that can make work less risky and increase productivity. This booklet shows some of the solutions, large and small, to WMSDs.

As you read this booklet, the solutions may or may not apply to your specific jobsite or trade. You will need to review cost, quality, and site-specific information to make sure that the solution will meet your needs. Also, these ideas can be adapted. Notice the principles involved: What kinds of activities are most likely to cause injuries? How can they be minimized?

Sometimes a small change in tools, equipment, or materials can make a big difference in preventing injuries. We wish you the best as you strive to make improvements to the work you do and your worksite.

NIOSH believes that better work practices and tools can reduce the frequency and seriousness of sprains and strains among construction workers.

These suggestions can be adapted for your own jobsite.

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